UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,565	11/28/2003	Tatsuya Sukehiro	OKI 391	4989

23995   7590   04/20/2007
RABIN & Berdo, PC
1101 14TH STREET, NW
SUITE 500
WASHINGTON, DC 20005

EXAMINER
VO, HUYEN X

ART UNIT	PAPER NUMBER
2626	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>29 September 2004</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>20 September 2004</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All b)☐ Some * c)☒ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
　　Paper No(s)/Mail Date *1 sheet*.

4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____ .

Claim Rejections - 35 USC § 101

1.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

2.   Claims 10-11 are rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter.

3.   Claim 10-11 is drawn to a "program" *per se* as recited in the preamble and as

such is non-statutory subject matter (*method of claim 10 can be written in a computer*

program suggested by claim 11). See MPEP § 2106.IV.B.1.a. Data structures not

claimed as embodied in computer readable media are descriptive material *per se* and

are not statutory because they are not capable of causing functional change in the

computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a

data structure *per se* held nonstatutory). Such claimed data structures do not define

any structural and functional interrelationships between the data structure and other

claimed aspects of the invention, which permit the data structure's functionality to be

realized. In contrast, a claimed computer readable medium encoded with a data

structure defines structural and functional interrelationships between the data structure

and the computer software and hardware components which permit the data structure's

functionality to be realized, and is thus statutory. Similarly, computer programs claimed

as computer listings *per se*, i.e., the descriptions or expressions of the programs are not

physical "things." They are neither computer components nor statutory processes, as

they are not "acts" being performed. Such claimed computer programs do not define

any structural and functional interrelationships between the computer program and

other claimed elements of a computer, which permit the computer program's

functionality to be realized.

4.   Claims 10-11 are drawn to an aligning method for multilingual documents as as

aligns in sorts of languages. In order for a claimed invention to be considered statutory

under 35 U.S.C. 101, it must be useful and accomplish a **practical application**. That

is, it must produce a "useful, concrete and tangible result" *(State Street, 149 F.3d at*

1373-74, 47 USPQ2d at 1601-02). In the present case, the final result of claim 10 only

refers aligning the documents in the n sorts of languages. There is no indication of a

"useful, concrete and tangible result". As such, claim 10 is directed to non-statutory

subject matter. The dependent claim 11 fails to overcome the 35 U.S.C. 101 rejection

directed towards independent claim 1, and thus, are also directed to non-statutory

subject matter.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless – (b) the invention was patented or described in a printed
> publication in this or a foreign country or in public use or on sale in this country, more than one year prior to
> the date of application for patent in the United States.

6.   Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by

applicant's admitted prior art.

7.   Regarding claims 1 and 10-11, applicant's admitted prior art discloses an

alignment system and method for multilingual documents as aligns the documents in n

sorts (: n being a natural number of at least 2) of languages, comprising:

morphological analysis means for dividing the document in each of the

languages, every word (*first paragraph on page 2 of the specification*);

means for selecting two of the n sorts of languages of the documents (*page 2 of*

the specification);

means for computing an evaluation function for the documents in the two

selected sorts of languages (*page 2 of the specification*); and

means for aligning the documents in the n sorts of languages, in accordance with

an evaluated result for the documents in the two sorts of languages (*pages 2-3 of the*

specification).

8.   Regarding claim 2, applicant's admitted prior art further discloses an alignment

system for multilingual documents as defined in claim 1, wherein said morphological

analysis means includes means for segmenting the document in each of the languages,

every sentence, and means for further dividing each of the segmental sentences, every

word (*pages 2-3 of the specification*).

9.   Regarding claim 3, applicant's admitted prior art further discloses an alignment

system for multilingual documents as defined in claim 1, wherein said means for

selecting two of the n sorts of languages of the documents selects (n-1) combinations of the kth and (k+1)th documents (: k being a natural number of 1 to (n-1)) when the documents in the n sorts of languages are arranged in any desired sequence (*pages 2-3 of the specification*).

10.   Regarding claim 4, applicant's admitted prior art further disclose an alignment system for multilingual documents as defined in claim 1, wherein said means for selecting two of the n sorts of languages of the documents selects n(n-1)/2 combinations (*pages 2-3 of the specification*), and further comprising computed result holding means for holding therein results computed with the evaluation function (*pages 2-3 of the specification*).

11.   Regarding claim 6, applicant's admitted prior art further discloses an alignment system for multilingual documents as defined in claim 1, wherein the evaluation function is expressed by the following formula: $h(x, y) = 2.\text{times}.f.\text{sub}.m(x, y)/(f.\text{sub}.j(x) + f.\text{sub}.j(y))$ where $h(x, y)$ denotes the evaluation function, x denotes a sentence in one language (original sentence), y a sentence in the other language (translated sentence), $f.\text{sub}.m(x, y)$ the number of independent words aligned in the sentences x and y, $f.\text{sub}.j(x)$ the number of independent words in the sentence x, and $f.\text{sub}.j(y)$ the number of independent words in the sentence y (*pages 2-3 of the specification*).

12.   Regarding claims 7-9, applicant's admitted prior art further discloses an

alignment system for multilingual documents as defined in claim 1, further comprising

means for displaying any mismatching part when alignments of the documents in at

least three of the n sorts of languages of the documents have mismatched (*pages 2-3 of*

the specification), wherein said means for computing an evaluation function aligns the

documents while optimizing the alignment so that a sum of values of the evaluation

function may be maximized (*pages 2-3 of the specification*), further comprising means

for indicating a language pair which affords a high correct solution rate of the alignment,

while investigating similarity data between the pair of languages (*pages 2-3 of the*

specification).

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Huyen X. Vo whose telephone number is 571-272-7631.

The examiner can normally be reached on M-F, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Patrick Edouard can be reached on 571-272-7603. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HXV   4/14/2007